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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/955,356	09/18/2001	Takashi Katayama	YAMAP0783US	9512
43076	7590	01/26/2006	EXAMINER	
MARK D. SARALINO (GENERAL) RENNER, OTTO, BOISSELLE & SKLAR, LLP 1621 EUCLID AVENUE, NINETEENTH FLOOR CLEVELAND, OH 44115-2191			DUNN, MISHAWN N	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 01/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/955,356	Applicant(s) KATAYAMA ET AL.	
	Examiner Mishawn N. Dunn	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 7-9, 11-13, and 15-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Applicant's admitted prior art, "MPEG Audio Bit Rate Scaling on Coded Data Domain," by Nakajima et al.

3. Consider claim 7. Nakajima et al. discloses a coding method, comprising: a first step of decoding a first stream signal in which a first video stream including a first video stream information generated by coding a first video signal and a first audio stream including a first audio stream information generated by coding a first audio signal are multiplexed (fig. 1); and a second step of generating, based on the decoded first stream signal, a second video stream including a second video stream information having a bit rate lower than the first video stream information and a second audio stream including a second audio stream information having a bit rate lower than the first audio stream information, and multiplexing the second video stream and the second audio stream to generate a second stream signal (pg. 3669, left col., line 45 – right col., line 1; fig. 1), wherein the first audio stream information is obtained by performing a time-frequency conversion on the first audio signal into a frequency domain signal to quantize the frequency domain signal (fig. 1), and the second step includes: a third step of

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calculating psychoacoustic model information indicating frequency bands of the first audio signal masked by auditory characteristics (pg. 3670, right col., lines 10-24); and a fourth step of converting, based on the psychoacoustic model information, the first audio stream information into the second audio stream information having a bit rate lower than the first audio stream information to generate the second audio stream (pg. 3670, right col., lines 30-36).

4. Consider claim 8. Nakajima et al teaches a coding method wherein: the quantization of the frequency domain signal is performed to indicate frequency spectrums for respective frequency bands of the frequency domain signal by mantissa parts and exponent parts; each of the exponent parts is a scale factor of each of the frequency spectrums for the respective frequency bands (fig. 1); the third step calculates the psychoacoustic model information based on the scale factors of the frequency spectrums for the respective frequency bands included in quantized information (pg. 3670, right col., lines 22-24); and the fourth step converts the first audio stream information into the second audio stream information having a bit rate lower than the first audio stream information by reallocating, based on the psychoacoustic model information, the number of bits allocated to the mantissa parts (pg. 3670, right col., lines 30-36).

5. Consider claim 9. Nakajima et al. discloses a coding method wherein: the quantization of the frequency domain signal is performed to indicate frequency spectrums for respective frequency bands of the frequency domain signal by mantissa parts and exponent parts; each of the exponent parts is a scale factor of each of the

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frequency spectrums for the respective frequency bands (fig. 1); the third step calculates the psychoacoustic model information based on dequantized frequency spectrums for the respective frequency bands generated by dequantizing the first audio stream information (pg. 3670, right col., lines 22-24); and the fourth step converts the first audio stream information into the second audio stream information having a bit rate lower than the first audio stream information by reallocating, based on the psychoacoustic model information, the number of bits allocated to the mantissa parts (pg. 3670, right col., lines 30-36).

6. Apparatus, program and medium claims 1-4, 11-13, and 15-17 are rejected for the same reasons as discussed in the corresponding method claims above.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 5, 6, 10, 14, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art, "MPEG Audio Bit Rate Scaling on Coded Data Domain," by Nakajima et al. in view of Li et al. (US Pat. No. 5,931,934).

9. Consider claim 5. Nakajima et al. discloses all the claimed limitations as stated above, except performing downmix processing so as to reduce the number of channels

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of the second audio stream to less than the number of channels of the first audio stream.

However, Li et al. teaches performing downmix processing so as to reduce the number of channels of the second audio stream to less than the number of channels of the first audio stream (col. 6, lines 55-59).

Therefore, it would have been obvious to one ordinary skill in the art, at the time the invention was made to use, to modify Nakajima et al. by performing downmix processing to lower the bit rate of the audio information, thus allowing information corresponding to a longer period of time to be recorded on the recording medium.

10. Method, program, and medium claims 10, 14, and 18 are rejected for the same reasons as discussed in the corresponding apparatus claim above.

11. Consider claim 6. Although Nakajima et al. does not specifically teach a coding device comprising: a receiving section, control section, and recording section, Nakajima et al. teaches a coding device having a decoder and re-encoder. An artisan with ordinary skill in the art would readily recognize that multiple features (receiving section, control section, recording section) could be added to a coding device. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use, to modify the coding device of Nakijima et al. by adding these elements to make the device more efficient.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mishawn N. Dunn whose telephone number is 571-272-7635. The examiner can normally be reached on Monday - Friday 7:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Groody can be reached on 571-272-7950. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mishawn Dunn
January 18, 2006


ROBERT CHEVALIER
PRIMARY EXAMINER